

MONTHLY WEATHER REVIEW,

MAY, 1877.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

The present REVIEW for the month of May depends upon all data received up to the 15th of June from the Canadian Meteorological Service, the United States Signal Service and Voluntary Observers, the Army Post Surgeons and the United States Navy. The most interesting features of the month have been:

First, The remarkably high temperature from the 18th to the 24th;

Second, The heavy rain-fall west of the Mississippi and the drought in California; also the light rains in the Lake region, and the forest fires in Michigan and New York;

Third, Injury done to grasshoppers in the West and Southwest by cold and rainy weather;

Fourth, The earthquake of Iquique, and the ocean wave resulting therefrom, also similar wave on the 15th on Lake Erie;

Fifth, The aurora of the 28th; and,

Sixth, Tornadoes and hail-storms in New York and New England on the 18th.

BAROMETRIC PRESSURE.

In General.—The general distribution of atmospheric pressure is shown by the isobars upon chart No. II; these present no marked resemblance to those of May in any of the preceding five years but agree better with the average or normal values. The barometric pressure has been decidedly low at the Rocky Mountain stations and in Oregon. By comparison with a chart of average mean pressures for May for the years 1872 to 1876, inclusive, it will be seen that during the present month the isobar of 30.00 has extended northward over the Lake region, or 12° of latitude north of its average position in Tennessee and Virginia. The area of pressures lower than 29.85 has, during the past month, been well developed on the eastern slope of the Rocky Mountains, and the same isobar crosses New Brunswick and Nova Scotia at an unusual distance inland. Barometric pressures have, therefore, been below the average in northern New England and the Canadian Provinces, but above the average in the Lake region.

Barometric Range.—The general range of the barometer over the whole country east of the Rocky Mountains was about 1.25 inches, as may be seen from the following table, which gives the maximum and minimum pressures that occur on the tri-daily maps (7:35 a. m., 4:35 p. m. and 11 p. m., Washington time,) near the centres of the respective areas of high and low barometer:

LOW AREAS.				HIGH AREAS.			
No.	Location.	Date.	Minimum Barometer.	No.	Location.	Date.	Maximum Barometer.
I.	Gulf of St. Lawrence...	May 3rd, 4:35 p. m.	29.24	I.	Texas	May 1st, 7:35 a. m.	30.10
II.	Tennessee	May 3rd, 4:35 p. m.	29.70	II.	Manitoba	May 7th, 7:35 a. m.	30.25
III.	Texas	May 3rd, 4:35 p. m.	29.65	II.	Lower Lakes	May 12th, 7:35 a. m.	30.40
IV.	Dakota	May 6th, 7:35 a. m.	29.44	III.	South Atlantic States...	May 15th, 7:35 a. m.	30.40
V.	Ohio valley	May 6th, 7:35 a. m.	29.65	III.	Manitoba	May 24th, 7:35 a. m.	30.37
VI.	Ohio valley	May 7th, 4:35 p. m.	29.67	III.	Middle Atlantic States...	May 28th, 7:35 a. m.	30.36
VII.	Halifax	May 10th, 7:35 a. m.	29.69				
VIII.	South Atlantic coast...	May 7th, 11 p. m.	29.68				
IX.	Manitoba	May 15th, 4:35 p. m.	29.65				
X.	Minnesota	May 17th, 4:35 p. m.	29.37				
XI.	Key West, Fla	May 17th, 4:35 p. m.	29.84				
XII.	Minnesota	May 23th, 11 p. m.	29.27				
	Minnesota	May 31st, 4:35 p. m.	29.16				